WHAT IS CLAIMED IS:

1. A decoder comprising:

a decode part receiving and decoding coded data including time control information defining a time related to decoding;

a processing control part instructing, when said coded data is input in said decode part at a speed slower than an original speed expressed by said time control information, to start decoding said coded data per unit and start outputting decoded data per said unit at a time suitable to said slower speed on the basis of said time control information;

a storage part temporarily holding said decoded data output from said decode part; and

an output control part outputting contents for one unit from said decoded data held in said storage part in a period suitable to said original speed on the basis of said time control information.

2. The decoder according to claim 1, wherein

said processing control part includes:

a clock generation part generating a reference clock signal,

a dividing part dividing said reference clock signal with the ratio of said slower speed to said original speed thereby generating a divided clock, and

a counting part counting said divided clock, and decides timings for starting said decoding and starting said output by comparing a count of said counting part with said time control information.

3. The decoder according to claim 2, wherein

said decode part decodes said coded data in synchronization with said divided clock.

4. The decoder according to claim 2, wherein

said decode part decodes said coded data in synchronization with said reference clock.

5. The decoder according to claim 2, wherein

said output control part includes another counting part counting said reference clock signal and decides said period by comparing a count of said another counting part with said time control information.

6. The decoder according to claim 5, wherein

said output control part regards one of timings for starting output per said unit decided by said processing control part as a starting point for outputting contents of said unit in said period.

7. The decoder according to claim 6, wherein

said coded data is data coded on the basis of MPEG 2-TS standards,

said time control information includes a program clock reference, a presentation time stamp, a decode time stamp and frame frequency information,

said clock generation part adjusts a frequency of said reference clock so that a time indicated by said program clock reference included in said time control information matches with a time indicated by said count of said counting part,

said processing control part decides a timing for starting said decoding on the basis of a result of comparison between said decode time stamp included in said time control information and said count,

said processing control part decides a timing for starting said output on the basis of a result of comparison between said presentation time stamp included in said time control information and said count of said counting part, and

said output control part decides said period on the basis of a result of comparison between said frame frequency information included in said time control information and said count of said another counting part counting said reference clock signal.

8. The decoder according to claim 1, wherein

said storage part holds a newest unit of said decoded data by updating already held data with said decoded data output from said decode part.

9. The decoder according to claim 8, wherein

said coded data is image data including inter-frame predictive-coded data and said unit is one frame,

said storage part also holds image data necessary for decoding said inter-frame predictive-coded data among said decoded data output from said decode part, and

said decode part refers to said image data necessary for decoding said inter-frame predictive-coded data held by said storage part thereby decoding said inter-frame predictive-coded data.

10. A reproducing unit comprising:

a decoder; and

a reproduced signal processing part reading coded data, recorded in a recording medium, including time control information defining a time related to decoding at a speed responsive to an external instruction and inputting said coded data in said decoder, wherein

said decoder includes:

a decode part receiving and decoding said coded data,

a processing control part instructing, when said coded data is input in said decode part at a speed slower than an original speed expressed by said time control information, to start decoding said coded data per unit and start outputting decoded data per said unit at a time suitable to said slower speed on the basis of said time control information,

a storage part temporarily holding said decoded data output from said decode part, and

an output control part outputting contents for one unit from said decoded data held in said storage part in a period suitable to said original speed on the basis of said time control information.